Massachusetts All-Payer Claims Database: Review of Recent Efforts and Discussion of Data Uses

May 2, 2011



Objectives of forum

- Define an "all-payer claims database" (APCD)
- Review recent efforts in Massachusetts to develop the APCD
- Review and comment on proposed uses of the APCD
- Discuss public use and restricted use files
- Provide feedback on potential data uses that are in the public interest
- Propose either additional data uses or analyses to be conducted by DHCFP



What is an All-Payer Claims Database (APCD)?

- All-Payer Claims Databases (APCDs) are large-scale databases that systematically collect health care claims data from a variety of payer sources which include claims from most health care providers*
 - Includes Medicare and Medicaid and encompasses both fully-insured and self-insured
 - Components can include medical claims, dental claims, pharmacy claims, and information from member eligibility files, provider files, and product files
 - These components may also include definitions of insurance coverage (covered services, group size, premiums, co-pays, and deductibles) and carrier-supplied provider directories

^{*} Source: National APCD Council, www.apcdcouncil.org



APCDs link critical information across file types to create a single, comprehensive dataset

All-Payer Claims Database

Provider File

Service/prescribing provider

Name, Tax ID, Payer ID, NPI, Specialty code, City, State, Zip code

Billing provider Name, payer ID, NPI

Member File

Personal Health Info (encrypted)

Subscriber and member names and social security numbers

Patient demographics

Age, gender, relationship to subscriber

Claims File

Medical Claims Pharmacy Claims Dental Claims

Service information

Service and paid dates, paid amount, admission types, diagnosis and procedure information

Product File

Type of Product HMO, POS, Indemnity

Type of contract Single person, family

Coverage type
Self-funded, Individual,
Small group



Why develop an APCD?

- Policies to promote delivery and payment reforms, and facilitate cost and quality transparency, require timely and reliable state-level data
- Unfortunately, traditional data sources are often insufficient to adequately inform and affect change in our health care delivery system
 - Data sources may have limited service sites, such as hospital discharge data and sample-based data (e.g., the Medical Expenditure Panel Survey [MEPS] and the National Ambulatory Care Survey)
 - Data sources may pertain to limited populations, such as Medicare or Medicaid
- An all-payer claims database provides a valuable window into provider and payer-level costs, population health indicators, and variation in health care utilization and outcome measures
 - It supplements other data for more robust and enhanced health research



There is currently no single repository for health care claims data in MA

- Health care claims data are collected by several government entities in various formats and levels of completeness
 - Health Care Quality and Cost Council (to populate its website and to create public use or limited use datasets for research purposes)
 - Group Insurance Commission (to support its Clinical Performance Improvement Initiative)
 - Division of Insurance (to produce HMO utilization reports)
 - Department of Public Health (to inform post-parturn depression screening reporting)
 - Commonwealth Connector Authority (to access plan provider information for consumer website)
 - MassHealth
- Current claims data collection is limited
 - Does not include self-insured (approximately 34% of \$\$), Medicare (15%), and Medicaid (15%) claims
 - Does not include member benefit/coverage information



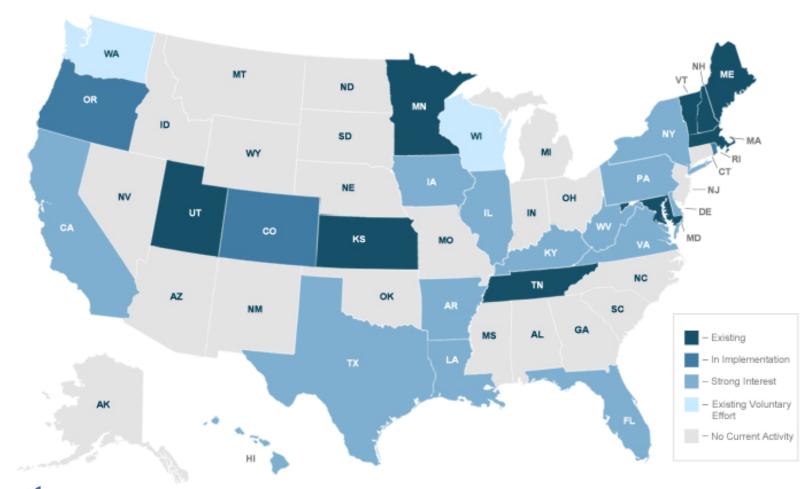
Overview of DHCFP efforts

 The Division of Health Care Finance and Policy (DHCFP), per M.G.L. c. 118G, §§ 6 and 6A, has broad authority to collect health care data

When	Milestone	
April 2010	DHCFP issued a notice of public hearing and released draft regulations for both collection and release of health care claims data	
May 2010	DHCFP held a public hearing on the proposed regulations	
July 2010	DHCFP adopted final regulations	
October 2010	DHCFP collected self-insured data for cost trends analyses	
February 2011	Health care payers began submitting all health care claims data to DHCFP for November 2010, December 2010, and January 2011	
March 2011	Payers are submitting regular data updates, on a monthly basis	



DHCFP's development of an APCD is consistent with a growing national trend





Four phases of APCD development in Massachusetts

- Planning
- Implementation
- Information Production (analytics and extracts)
- Potential Ongoing Enhancements



Phase One: Planning (August 2008 – July 2010)

Key Highlights

- Established a collaborative process with stakeholders
- Aligned Massachusetts technical specifications for submissions with APCD efforts in other states, particularly in New England, where payers may be subject to compliance from multiple states
- Adopted final data collection and release regulations
- Prepared application for Medicare data
- Documented business requirements of other governmental agencies to meet their data needs
- Evaluated software tools for data analytic enhancements (High Risk, Episode, Preventable Readmissions, etc.)



Phase Two: Implementation (August 2010 – ongoing)

Key Highlights

- Built the technical system to collect claims data
- Purchased Episodic Treatment and Episodic Risk Group software
- Ensuring protection and de-identification of personal and sensitive information
 - Completed and passed a penetration test of the web portal service utilized for sending encrypted data files
 - Conducting a third-party SAS70 audit to validate the operational effectiveness of agency's security program and affirm full compliance with federal HIPAA rules and state laws
- Conducting daily technical assistance calls regarding data submission with payers
- Developing ISAs and MOUs with other governmental entities
- Integrating Medicare data into APCD
- Partnering with NAHDO and APCD Council to create data standards with ANSI X12 and NCPDP data standardization boards
- DHCFP is gearing up to receive all health care claims data for 2008, 2009, and 2010 from payers in May 2011



DHCFP will undertake detailed efforts to ensure the APCD has reliable and accurate information

- Data Completeness: Sample efforts
 - DHCFP will compare the number of member eligibility files submitted to the APCD with the 1099-HC tax form available from the Department of Revenue - currently developing Interagency Service Agreement
 - Variance Requests will be reviewed element by element to better understand missing data
- Data Standardization: Sample efforts
 - DHCFP will compare current data (2010 and 2011) in the APCD to previous submissions to other governmental agencies
 - DHCFP will compare historical data (2008 and 2009) in the APCD to previous submissions to other governmental agencies
- Data Quality and Integrity: Sample efforts
 - DHCFP will analyze test and production files received in February 2011
 - DHCFP will perform several quality assurance checks, including data type mismatches, crossfile linkages for accuracy, claims versioning consistency across payers, etc.
- The quality and completeness of the data submitted by payers will impact when the APCD will be ready for use



Phase Three: Information production

- DHCFP proposes a three-pronged approach to this phase
 - Utilization of data for DHCFP's statutorily required analyses
 - Provision of data to other state governmental agencies for their statutorily required uses
 - Release of data to external entities for uses in public interest
- The purpose of today's forum is to
 - Review and comment on this three-pronged approach
 - Discuss public use and restricted use files
 - Provide feedback on proposed data uses that are in the public interest
 - Propose either additional data uses or analyses to be conducted by DHCFP



Step 1: Utilization of data for DHCFP's statutorily required analyses

- Cost Analysis: DHCFP was granted authority to collect health care claims data in order to inform
 its annual study of "health care provider and payer costs and cost trends, factors contributing to
 cost growth within the Commonwealth's health care system, and relationship between provider
 costs and payer premium rates"
- Total Medical Expenses: Facilitate the calculation of claims-based total medical expenses (TME);
 broad participation from over 100 registered payers within the APCD may allow for more accurate tracking of medical spending
- **Relative Prices**: Facilitate future calculations of relative prices (RP) that compare how much a carrier would pay each provider for a standard mix of services across a standard mix of insurance products relative to other, similar providers in a carrier's network
- Other Research Efforts: Inform other efforts to monitor the Massachusetts health care delivery system, specifically in relation to quality and performance outcomes, and understand the impact of payment and delivery system reforms
- Internal analysis will serve as a critical step in refining data quality or completeness issues



Step 2: Provision of data to other governmental agencies for their statutorily required uses

- The APCD can serve as the central repository of health care claims data for Massachusetts state agencies
- Massachusetts payers will submit claims data to the APCD and DHCFP can provide the required data extracts to other agencies
 - This will eliminate duplicative data requests by state governmental entities and result in administrative simplification for payers
- There may need to be an interim transition period in which other agencies will continue collecting data while payers are also submitting to the APCD – this parallel process allows for validation of data quality
 - DHCFP is in active discussions with other state governmental agencies (HCQCC, GIC, DOI, MassHealth, Connector, DPH, DOR) to consolidate existing and future reporting requirements
- DHCFP intends to make data sets available for state governmental agencies to review by late 2011



Step 3: Release of data to external entities for uses in public interest

- DHCFP is committed to facilitating transparency within the Massachusetts health care delivery system
- The availability and release of all-payer claims data will enhance public and private research projects related to cost, medical service utilization, health care quality, and comparative effectiveness
- DHCFP intends to have data files made available through an application process
 - The timing of the release files will be dictated by the quality and completeness of the data submitted by payers
 - DHCFP is committed to thoroughly reviewing the integrity of the data before it is broadly disseminated in order to support analyses in the public interest



DHCFP has adopted regulations governing the use of the all-payer claims database

- Pursuant to M.G.L. c. 118G §6, data submitted by payers are not a public record
- 114.5 CMR 22.00: Health Care Claims Data Release governs the disclosure of all member eligibility and claims data submitted by payers to DHCFP
 - Purpose of the regulation is to make health care claims data available as a resource where such access serves the public interest while safeguarding the privacy rights of claims data subjects
- Two types of claims data extracts will be made available via application for each of the six APCD file types (medical claims, dental claims, pharmacy claims, member eligibility file, provider file, and product file)
 - Public Use contains de-identified member and utilization data elements and exclude payer identifiers (Appendix A)
 - Restricted Use contains certain data elements that will not be disclosed unless applicant fulfills certain requirements (Appendix B)
 - This approach is consistent with the two levels of data release files available from the HCQCC, Maine, New Hampshire, Vermont, and Colorado



Types of claims data available for release

- Applicants for Public Use Files shall specify the purpose for which data is requested
- Applicants for Restricted Use Files must demonstrate a need for requested restricted data elements
- Applicants requesting Medicare data will be required to conform with CMS requirements to obtain and use applicable data
- Medicaid data will not be released in response to any application, unless the release of such data conforms to all applicable federal and state laws and regulations, including laws and regulations governing the deidentification of such data, and any data



Specified uses that serve the public interest

- 114.5 CMR 22.00 provides examples of studies in the public interest including, but not limited to
 - Health cost and utilization analysis to formulate public policy
 - Financial studies and analyses of provider payment systems
 - Utilization review studies
 - Health planning and resource allocation studies
 - Studies that promote improvement in health care quality or a mitigation of health care cost growth
- The regulatory language allows for consideration of new, innovative uses
 - Each application merits a comprehensive review with thoughtful comments and questions that address the case-specific proposal



Similar criteria used to define public interest in other Massachusetts datasets

APCD	Casemix data	HCQCC
Health care cost utilization and analysis to formulate public policy	Same as APCD	Same as APCD
Financial studies and analysis of provider payment system	Same except limited to hospital payment systems	Same as APCD
Utilization review studies	Same as APCD	Same as APCD
Health planning and resource allocation studies	Same as APCD	Same as APCD
Studies that promote improvement in health care quality or a mitigation of health care cost growth	_	Studies to develop indicators of quality of care and to identify areas for improvement
TBD	Epidemiological studies, including the identification of morbidity and mortality patterns	Same as casemix
TBD	Studies of prevalence and incidence of diseases	Same as casemix
TBD	Studies and investigation of other health care issues	Same as casemix
TBD	Investigations of fraud and abuse	-
TBD	Hospital merger analyses	Health care facility merger analysis
_	_	Consistent with mission of HCQCC



What other criteria will DHCFP consider to define public interest?

- Protection of an individual's privacy
- Security of information
- Compliance with all federal and state laws and regulations
 - Health Information Portability and Accountability Act (HIPAA) & Fair Information Practices Act (FIPA)
- Protection of confidential business data



Phase Four: Potential ongoing enhancements Estimated timeframe: Calendar year 2013 onwards

While DHCFP is always seeking opportunities to enhance the APCD, these specific options are proposed for discussion

- DHCFP can create pre-determined modules based on specific, common data uses
 - Traditional model for release is to create files based on tiers of data sensitivity. These allencompassing files are relatively easy to produce but require applicants to prepare and purchase technical hardware and software to support data intake and analysis
- DHCFP may provide enhanced data access through a web-based interface that would give applicants access to approved files and the ability to utilize analytic software tools, such as episodic treatment groupers (ETGs) and risk-adjustment software (DxCG), and tools to generate reports and dashboards for analysis
 - This web-based access is beneficial to those who otherwise would not have the IT infrastructure or resources to invest in expensive analytic tools and the experienced staff to manipulate data files
- DHCFP's analytic and technical staff could be made available, for an additional fee, to guide users of the data and help troubleshoot issues



APCD forum next steps

- Next APCD forum: Friday, May 13th from 2pm 4pm at the State Transportation Building, Boston, MA
- Topics: Application process and Data Release Committee
- Please provide additional feedback on the topics discussed today by completing a brief survey: www.surveygizmo.com/s3/529879/All-Payer-Claims-Database-Forum-1-survey
- For more information, please visit: www.mass.gov/dhcfp/apcd

